Claims

[1] A light emitting device comprising:
a light emititng chip; and
a phosphor through which a first light emitting from the light emitting chip passes,
wherein the phosphor comprises a silicate phosphor exciting a second light having a first centered emission peak using the first light and a sulfide phosphor exciting a third light having a second centered emission peak using the first light.

[2] The light emitting device according to claim 1, wherein the first centered emission peak is in a range of 550 - 600 nm.

[3] The light emitting device according to claim 1, wherein the second centered emission peak is in a range of 500 - 550 nm.

[4] The light emitting device according to claim 1, wherein the silicate phosphor has a chemical formula of Sr3-xSiO5:Eu^{2+} x($0 < x \leq 1$).

[5] The light emitting device according to claim 1, wherein the sulfide phosphor has a chemical formula of Sr1-xGa2S4:Eu^{2+} x($0.001 \leq x \leq 1$).

[6] The light emitting device according to claim 1, wherein the silicate phosphor and the sulfide phosphor exist at a ratio of 1 : 1 to 1 : 9.

[7] The light emitting device according to claim 1, wherein the phosphor has a particle size of $d90 \leq 20$ □, $5 \leq d50 \leq 10$ □.

[8] The light emitting device according to claim 1, wherein the light emitting chip emits blue light.

[9] The light emitting device according to claim 1, wherein the phosphor is molded in a periphery of the light emitting chip or on the light emitting chip.

[10] The light emitting device according to claim 1, wherein the phosphor is manufactured by mixing the phosphor with a light transmitting resin.

[11] The light emitting device according to claim 10, wherein the resin is an epoxy resin or a silicon resin.

[12] The light emitting device according to claim 1, wherein the silicate phosphor is a yellow series and the sulfide phosphor is a green series.

[13] A phosphor of a light emitting device, comprising:
a silicate phosphor excited by a light generated by a light emitting chip and having a chemical formula of Sr3-xSiO5:Eu^{2+} x($0 < x \leq 1$); and
a sulfide phosphor excited by the light generated by the light emitting chip and having a chemical formula of Sr1-xGa2S4:Eu^{2+} x($0.001 \leq x \leq 1$).

[14] A ligth emitting device comprising:
a substrate;

a light emitting chip emitting a light;
a connection part for electrically connecting the substrate with the light emitting chip;
a phosphor encapsulating the light emitting chip and through which the light passes;
a silicate phosphor contained in the phosphor and having a chemical formula of $Sr3\text{-}xSiO5:Eu^{2+}\ x(0 < x \leq 1)$; and
a sulfide phosphor contained in the phosphor and having a chemical formula of $Sr1\text{-}xGa2S4:Eu^{2+}\ x(0.001 \leq x \leq 1)$.

[15] The light emitting device according to claim 14, wherein when the light emitting device is a top view type, the silicate phosphor and the sulfide phosphor exist at a ratio of 1 : 2 to 1 : 3.

[16] The light emitting device according to claim 14, wherein when the light emitting device is a side view type, the silicate phosphor and the sulfide phosphor exist at a ratio of 1 : 3 to 1 : 4.

[17] A ligth emitting device comprising:
a leadframe;
a light emitting chip emitting a light;
a connection part for electrically connecting the leadframe with the light emitting chip;
a phosphor encapsulating and molding the light emitting chip and through which the light passes;
a silicate phosphor contained in the phosphor and having a chemical formula of $Sr3\text{-}xSiO5:Eu^{2+}\ x(0 < x \leq 1)$; and
a sulfide phosphor contained in the phosphor and having a chemical formula of $Sr1\text{-}xGa2S4:Eu^{2+}\ x(0.001 \leq x \leq 1)$.

[18] A ligth emitting device comprising:
a light emitting chip emitting a light; and
a resin-based phosphor through which the light emitting from the light emitting chip passes;
wherein the phosphor comprises a yellow silicate phosphor exciting a second light having a first centered emission peak using the first light and a green sulfide phosphor exciting a third light having a second centered emission peak using the first light, and the green sulfide phosphor and the yellow silicate phosphor exist at a ratio of 1 : 2 to 1 : 5.

[19] The light emitting device according to claim 18, wherein the phosphor is contained at a ratio of 15 - 30 wt% with respect to the base so as to emit white light.

[20] The light emitting device according to claim 18, wherein the phosphor is contained at a ratio of 5 - 15 wt% with respect to the base so as to emit bluish light.